# Alaska Snow Survey Report



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Cover Photo: Snowpack meets high tide mid-March on northern Chichagof Island in Southeast Alaska. Lower elevation snowpacks in Southeast started melting out during March, while higher elevation snowpacks in Southeast continued to gain water content over the month.

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## **General Overview**

#### **Updated 1991-2020 Snow Survey and Water Supply Normals**

Every 10 years, The NRCS's Snow Survey and Water supply Forecasting Program (SSWSF) produces new 30-year central tendency statistics. These are often call the site Normals. The new 1991-2020 Normals have been developed and are being used in this publication. A detailed discussion can be found on the National Water and Climate Center's website <a href="here">here</a>. The main take away is that "100% of Normal" this winter is not likely to be the same as it was last decade. A side-by-side comparison of the new and old Alaska snowpack Normals for February can be found here.

#### SnowPack

When it rains, it pours, and the April 1 snowpack which has been robust for most of the winter, continues to be substantial across Alaska and the Yukon Territory. Below normal snow measurements are few and far between. Snowpacks in the Tanana and Upper Yukon, as well as portions of the Susitna, Copper and Central Yukon are record breaking. It is difficult to convey the shear amount of land in the central and eastern portions of the state and Yukon territory with record breaking snowpack. Giant, enormous, ginormous. Any way you look at it, the snowpack is above normal for almost the entirety of the state. There will not be a scarcity of snow melt water in the rivers this year. Of the 189 Alaska stations with 10 or more years of record, 45 reported their period-of-record high SWE for April 1. The trend of exceptional snowpack continues into the Yukon Territory, where 20 out of 36 SWE measurements were all-time records.

After an exceptional February the storm train continued through March for most of Southern and Central Alaska. In Southeast Alaska, precipitation was mixed which resulted in loss of snowpack in lower area and gains up higher. Precipitation trends were similar in Southcentral Alaska, but with less substantial

		Basin Index			
		Current	Last Year		
Alaska Statewide Snowpack	# of Sites	Percent of Median	Percent of Median		
Upper Yukon Basin	34	164	135		
Central Yukon Basin	26	181	90		
Tanana Basin	28	210	113		
Koyukuk Basin	16	143	92		
Kuskokwim Basin	2	142	173		
Lower Yukon	9	155	115		
Copper Basin	23	154	110		
Matanuska-Susitna Basin	26	162	104		
Northern Cook Inlet	11	141	133		
Kenai Peninsula	23	119	133		
Western Gulf of Alaska	9	117	114		
Southeast Alaska	12	134	170		

## **General Overview**

#### **Snowpack continued**

decreases in snowpack from rainfall. In the Susitna basin all measurements made considerable advances over the month, as did the Western Gulf, and most of the Kenai Peninsula and Northern Cook Inlet region.

Travelling north of the Chugach Mountains in the central portion of the state, snowfall statistics get interesting. The portion of the Chugach that feeds into the Copper River is normally one of the snowiest places in Alaska; this year it's an outlier and is one of the few places with below normal snowpack. This is not true of the basin at-large. Several snow courses in the northern reaches of the Copper started March with record Snow Water Equivalent (SWE), and then received record snowfall over the month.

This is also true of the portion of the Tanana north of the Eastern Alaska range. Near historic March snowfall added to SWE measurements that were already record breaking on March 1, although this is not true of the whole basin. In the north and west reaches of the basin, March snowfall goes from exceptionally above normal to below. The basin, overall, has much above normal snowpack.

The directional drying out noted in the Tanana was mirrored in the Central Yukon. Most of the basin remains bolstered by historic gains made in December, as well as an above normal February. March snowfall was generally lackluster although the basin continues to be substantially above normal.

Northern Alaska did not fare as well with regarding March snowfall. All reporting stations received less than normal March precipitation. Snowpack in the treeless wind-swept reaches of the state is always a hard metric to quantify; however, comparisons with period of record snow depth readings indicate this area to be near normal.

The snowpack across the state of Alaska on April 1 is well above normal. There are small pockets of below normal snowpack, but they are few and far between, and mostly confined to lower elevations. The Tanana and Upper Yukon basins are reporting record snowpacks. Portions of the Central Yukon, Susitna and Copper are also reporting historic snowpack

#### Precipitation

March precipitation was variable across Alaska. Generally, it was robust in Southern Alaska and miniscule in Northern Alaska. Alaska, north of the Tanana, received below average monthly precipitation with most sites receiving less than half average March precipitation. Precipitation patterns transition in the Tanana basin, with the northern portion of the basin gaining below average March precipitation and the southern portion, above average. Southcentral and Southeast Alaska mostly had above normal precipitation. Lower elevation sites in Southeast collected much of the month's precipitation as rain.

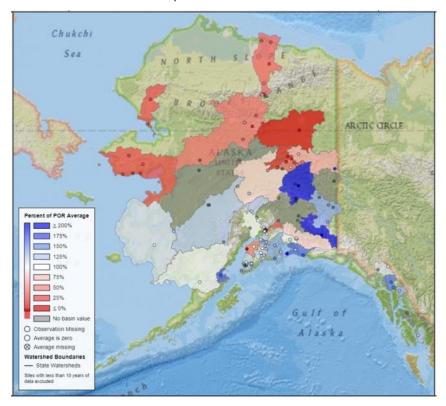
#### **Temperature**

The trend of remarkably warm temps in February was reversed in March for most of Alaska. Much of the state experienced normal to below normal March temperatures. Gulkana and Talkeetna were 6°F and 5°F cooler than normal, respectively. Anchorage was 5°F cooler. Homer and Cordova both reported temps 3°F cooler than normal. Utqiagvik was the only station that reported an above normal monthly temperature for March, 6°F warmer than average.

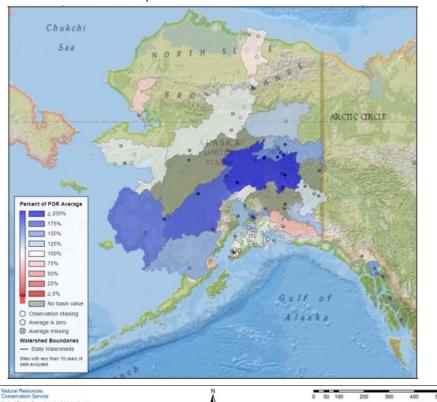
## Alaska Statewide Precipitation Maps

Monthly Precipitation for March, 2022

(% of NRCS 91-2020 Median

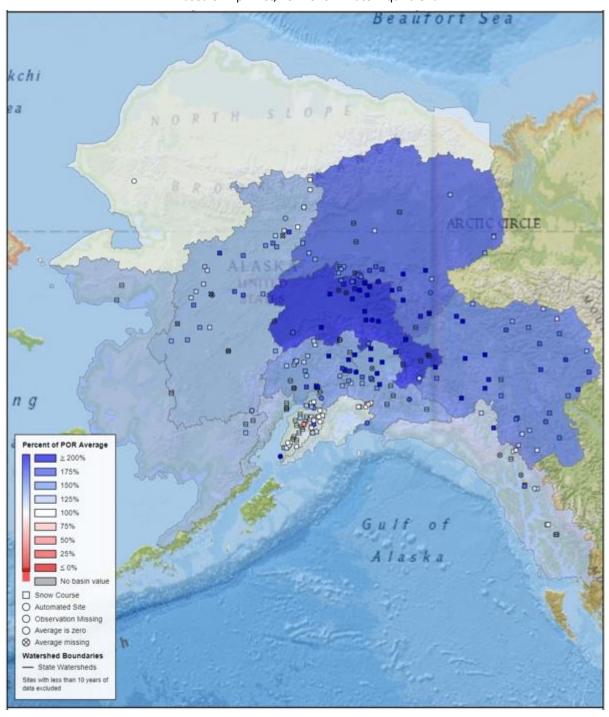


Water Year-to-date Precipitation (Oct. 1-March 31st, 2022)
(% of NRCS 91-2020 Median



## Alaska Statewide Snowpack Map

Based on April 1st, 2022 Snow Water Equivalent





## **Streamflow Forecasts**

FORECAST POINT*	Percent of	Period
	Ave. Flow	
Yukon River at Eagle	152	April - July
Porcupine River nr Int'l Boundary	132	April - July
Yukon River near Stevens Village	136	April - July
Tanana River at Fairbanks	160	April - July
Tanana River at Nenana	150	April - July
Little Chena River near Fairbanks	206	April - July
Chena River near Two Rivers	175	April - July
Salcha near Salchaket	191	April - July
Kuskokwim River at Crooked Creek	120	April - July
Sagvanirktok River near Pump Station 3	108	April - July
Kuparuk River near Deadhorse	110	April - July
Gulkana River at Sourdough	200	April - July
Little Susitna River near Palmer	165	April - July
Talkeetna River near Talkeetna	125	April - July
Ship Creek near Anchorage	130	April - July
Kenai River at Cooper Landing	110	April - July
Bradley Lake Inflow	105	April - July
Taiya River nr Skagway	138	April - July

#### Snowmelt Runoff Index (SRI): for streams which no longer have stream gauging

Showing Randi mack (Shi). for streams which no longer have st	ream gauging		
FORECAST POINT	INDEX		
Koyukuk River at Hughes	1.0		
MF Koyukuk R near Wiseman	0.5	Index	Key:
Slate Creek at Coldfoot	0.5		
Beaver Creek above Victoria Creek	2.0		much below aver-
Birch Creek below South Fork	3.0	-2 to -3	age snowmelt run-
Caribou Creek at Chatanika	2.0		off
Susitna River near Gold Creek	3.0		UII
Chulitna River near Talkeetna	0.0		
Deshka River at mouth near Willow	2.0		below average
Montana Creek at Parks Highway	2.0	-1 to -2	snowmelt runoff
Willow Creek near Willow	2.5		
Skwentna River at Skwentna	_		avorago spovimolt
Chuitna River near Tyonek	_	-1 to +1	average snowmelt
Campbell Creek near Spenard	2.0	-1 (0+1	runoff
Indian Creek at Indian	1.0		
Bird Creek at Bird Creek	1.0		above average
Glacier Creek nr Girdwood	2.0	+1 to +2	snowmelt runoff
Six Mile Creek near Hope	0.5		
Resurrection Creek near Hope	1.0		
Grouse Ck at Grouse Lake Outlet nr Seward	1.0	2. 2	much above aver-
Anchor River near Anchor Point	0.0	+2 to +3	age snowmelt run-
Deep Creek near Ninilchik	-1.0		off
Ninilchik River near Ninilchik	-1.0		
Fritz Creek near Homer	0.5		
Skagway River at Skagway	2.5		
Municipal Watershed C nr Petersburg	0.5		
Gold Creek near Juneau	2.0		

#### **HOW FORECASTS ARE MADE**

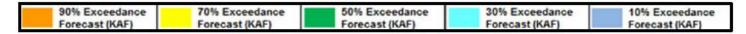
Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

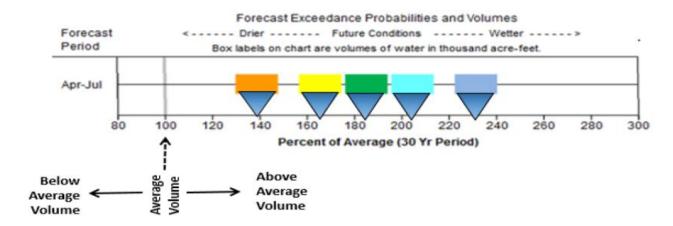
#### **How to Interpret the Streamflow Forecast Graphic:**

This graphic provides a visual alternative to the forecast tables the NRCS has presented for years. It gives both the volume and percent of average of each of the five forecast exceedances.

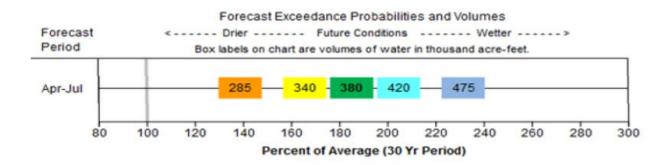


The five colored boxes represent each forecast's five exceedances.

The center of each forecast exceedance box corresponds to that exceedance's percent of average on the horizontal axis. In this case the green 50% exceedance forecast box is centered over 185% of average streamflow. If drier future conditions occur the orange box (90% exceedance) is 139% of average. If wetter future conditions occur the darker blue box (10% exceedance) is 232% of average. In some cases when exceedance volumes are similar, the width of the colored boxes gets squeezed. Still use the center of the box to determine its percent of average. The width of the box is irrelevant. Boxes to the right of the gray 100% of average line represent above average volumes. Conversely,



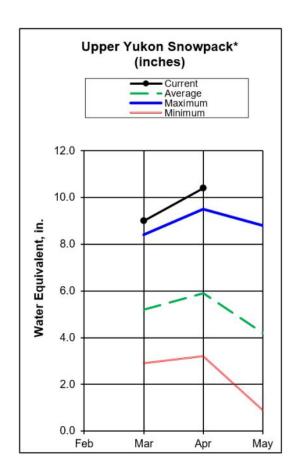
any boxes to the left of the gray 100% line represent below average volumes. In this case all forecast exceedances are for above average April-July volumes. Averages are based on the 1981-2010 period. The number inside or above each colored box represents the volume of that exceedance forecast in thousand acre-feet (KAF). In this case the green 50% exceedance forecast volume is 380 KAF which is centered above 185% of average. Volumes decrease with drier future conditions (left of green

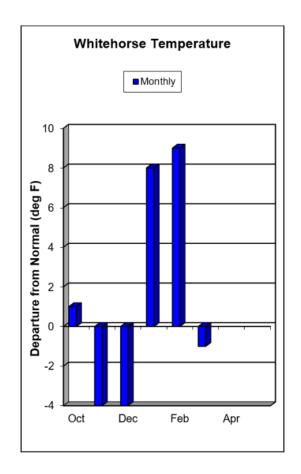


box) and increase with wetter conditions (right of green box).

Forecast graphics for other basins are available at: https://www.wcc.nrcs.usda.gov/wsf/Fcst\_Chart/ This is an new product. Please submit likes, dislikes and questions to Daniel.Fisher2@usda.gov

## **Upper Yukon Basin**





#### **Snowpack**

The snowpack in the upper Yukon is well above normal. The basin's sites are indexing at 164% of normal SWE on April 1, 2022. There isn't a single snow course in the upper Yukon that is reporting below normal. The smallest deviation is the Log Cabin, BC snow course at 119%. Out of the 36 SWE measurements this month, 20 were all time maximums. March 1 showed a similar amount of all-time records and every snow measurement in the basin made advances over April. The Yukon River flow forecast is the highest it's ever been, with the 50% exceedance probability at 152% of average.

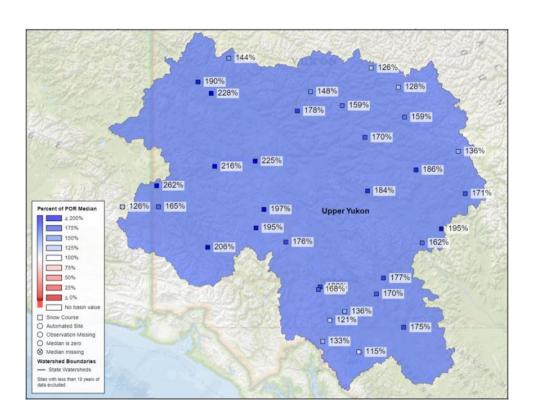
## Upper Yukon Basin

## **Snowpack Data**

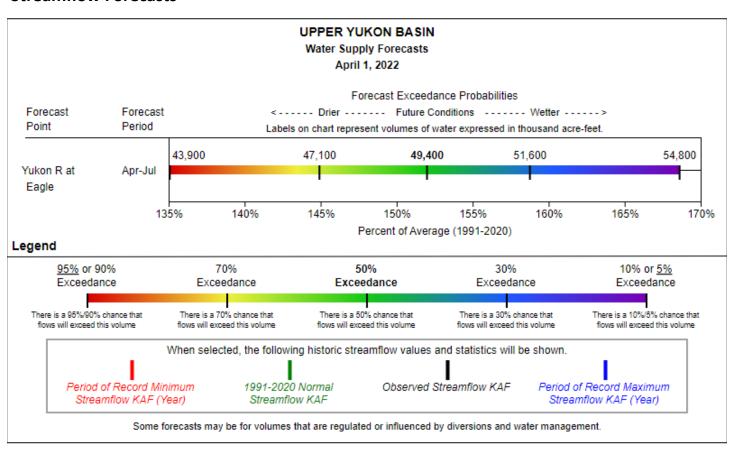
		Snow Depth (in)		Water Content (in)			
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Atlin Lake	2395	21	35	20	5.4	8.4	4.4
Beaver Creek	2150	36	27	18	8.4	5.2	3.2
Blackstone River	1020	34	26		7.2	4.8	
Burns Lake	3650	16	48	38	15.6	11.5	8.8
Burwash Airstrip	2660	18	13	10	3.7	2.1	1.8
Calumet	4300	46	40	35	10.8	7.2	7.3
Casino Creek	3495	45	32	26	11.0	6.1	5.3
Chair Mountain	3500	32	25	21	6.6	4.8	4.0
Edwards Lake	2720	43	37	28	10.2	8.5	6.0
Finlayson Airstrip	3240	34	30	20	8.6	6.7	4.4
Francis River	730	48	42		11.4	8.5	
Fuller Lake	3695	44	40	33	10.3	8.7	7.6
Grizzly Creek	3200	39	34	31	9.8	7.4	6.8
Hoole River	3400	37	44	28	8.9	10.6	5.8
Hyland	855	46	45		11.9	11.0	
Jordan Lake	3050	37	36	24	9.2	8.5	5.1
King Solomon Dome	3540	53	34	32	14.6	7.1	6.9
Log Cabin B.C.	2900	59	86	50	19.1	30.9	16.0
Macintosh	3805	33	23	22	7.8	4.1	3.9
Mayo Airport	1770	29	14	18	6.6	3.1	3.7
Meadow Creek	4050	67	55	46	18.5	13.9	11.2
Midnight Dome	2805	49	34	30	12.0	6.6	6.4
Montana Mtn.	3350	28	43	26	7.0	10.7	5.8
Morley Lake	2700	35	38	26	9.8	9.6	5.6
Mt. Mcintyre B	3600	42	41	28	10.4	9.2	6.4
Mt. Nansen	3350	28	22	19	6.3	4.0	3.2
Ogilvie River	550	35	25		6.9	4.8	
Pelly Farm	1550	27	23	16	7.2	4.5	3.2
Pine Lake Airstrip	995	56	48		15.8	12.0	
Plata Airstrip	2725	46	44	33	12.1	9.7	7.4
Rackla Lake	3410	45	35	35	9.6	6.7	7.3
Rose Creek Faro	1080	35	32	24	8.3	6.8	4.8
Russell Lake	3480	57	44	37	15.1	9.8	8.3
Satasha Lake	3630	29	26	20	6.7	4.7	3.8
Summit	985	44	55	30	11.6	16.8	7.6
Tagish	3540	32	38	27	8.0	9.2	6.0
Twin Creeks	2950	51	39	32	13.6	8.7	7.2
Watson Lake Airport	685	49	35		12.3	7.6	
Whitehorse Airport	2300	27	31	20	7.2	7.0 7.1	4.2
Williams Creek	3000	35	28	20	8.0	5.0	3.8
Withers Lake	3200	47	43	36	11.3	9.7	8.4
	0200	<b>⊣</b> 11	70	00	11.0	0.1	0.7
*Estimate							

## **Upper Yukon Basin**

#### **Upper Yukon Snowpack**

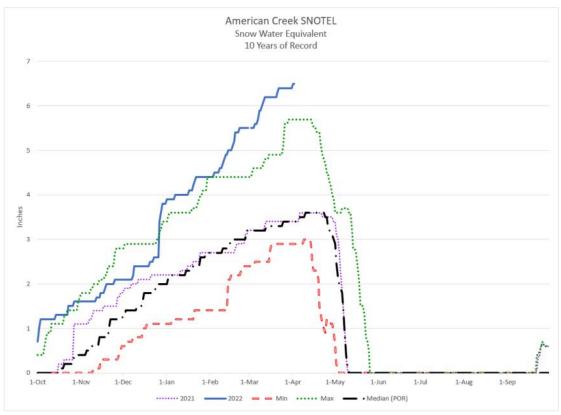


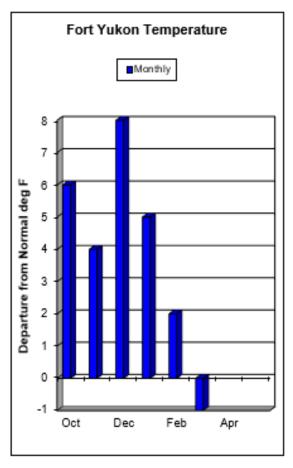
#### **Streamflow Forecasts**



## Central Yukon Basin







### **Snowpack**

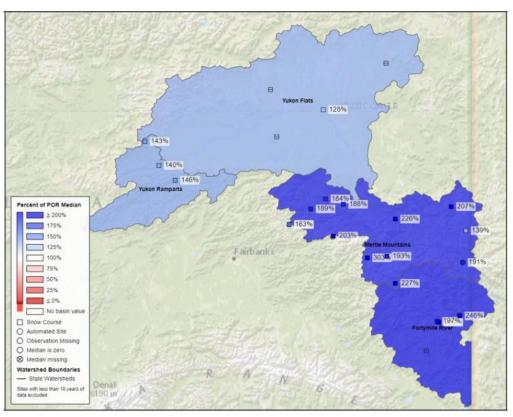
The snowpack in the Central Yukon basin is above normal. This snowpack continues to be bolstered by massive gains from earlier in the winter. Despite March precipitation being below normal, all reporting stations are well above median. The 3 snow courses on the Taylor Highway boasted period of record maximum April 1 SWE. The Chicken Airstrip snow course ranks highest in 57 years of observation. The 3 Steese Highway snow courses in this basin also reported period of record maximum April 1 SWE. Both Stack Pup and Circle Hot Springs snow courses have the highest SWE reported in 48 years of observation. Further downstream in this basin, snow totals are less record breaking, although every station in this basin is reporting above average snowpack. The basin index is reporting 180% of normal SWE on April 1, 2022.

## Central Yukon Basin

## **Snowpack Data**

		Snow Depth (in)		Water Content (in)			
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
American Creek	1050	30	17		6.5	3.4	
Atigun Pass	4800	39	41				
Borealis	1330	33		25	8.6		5.2
Boundary	3500	43	27	24	12.3	4.7	5.5
Cathedral Creek	1800	36	27	26	8.2*	4.6*	5.9
Chicken Airstrip	1650	24	16	15	6.1	2.5	3.2
Circle Hot Springs	860	38	23	22	7.5	3.8	4.0
Coal Creek	1000	38	20	20	8.8	3.1	3.9
Copper Creek	2000	26	11	15	5.8*	1.8*	3.0
Crescent Creek	2600	39	12	16	10.9*	2.0*	3.6
Eagle Plains	2330	42	30	31	9.4	5.8	6.5
Eagle River	1115	36	29	26	8.1	4.8	5.2
Eagle Summit	3650	18	15				
Fort Yukon	430	21	17				
Fort Yukon	430	24	19	20	4.6	2.8	3.6
Fossil	1400	31		24	8.0		5.1
Hess Creek	1000	32	26	26	7.6	4.8	5.2
Jack Wade Jct	3585	42	30		8.5	4.4	
Lost Chicken Hill	2150	30	20	17	7.3	3.1	3.6
Old Crow	980	29	25	26	6.7	4.2	5.2
Ptarmigan Creek	2270	35	30	24	8.5	5.0	4.4
Riffs Ridge	2130	39	28	30	8.4	5.1	6.0
Seven Mile	600	32	23	26	7.3	4.8	5.2
Stack Pup Creek	1620	34	23	22	7.0	3.9	3.8
Step Mountain	2850	46	25	28	12.4*	4.3*	6.0
Thirty Mile	1350	44	29	30	10.9*	5.0*	6.6
Three Fingers	3350	51	28	28	14.3	4.8	6.3
Upper Nome Creek	2520	34			8.4		
Windy Gap *Estimate	1900	35	35	26	9.8	6.3	5.9

## **Snowpack Map**



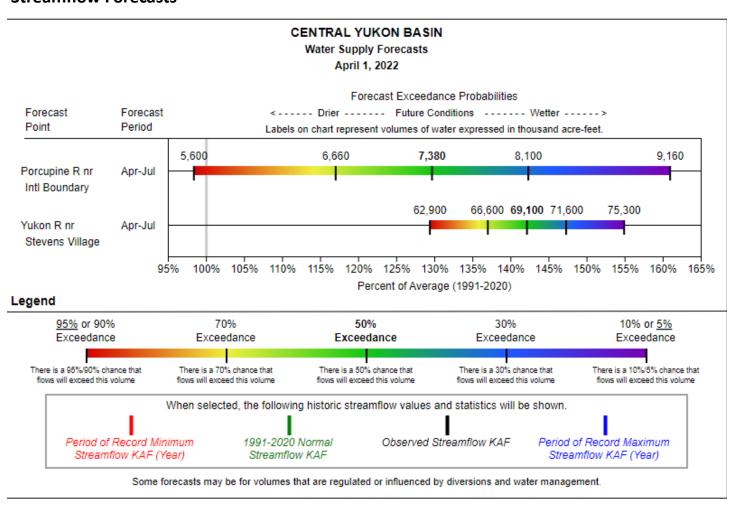
### Central Yukon Basin

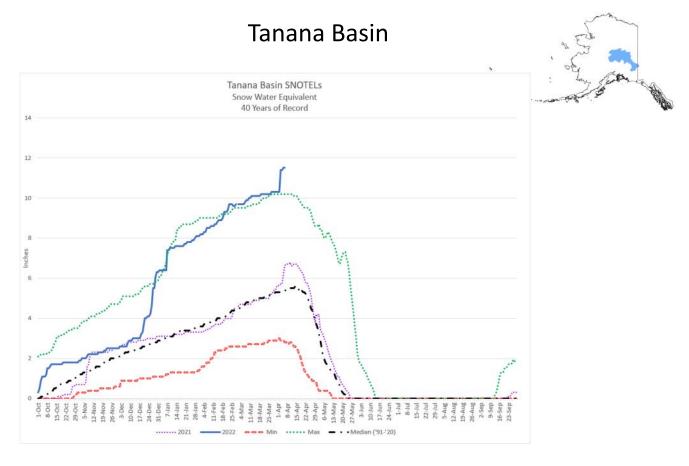
#### **Precipitation**

Inches Accumulated since October 1st

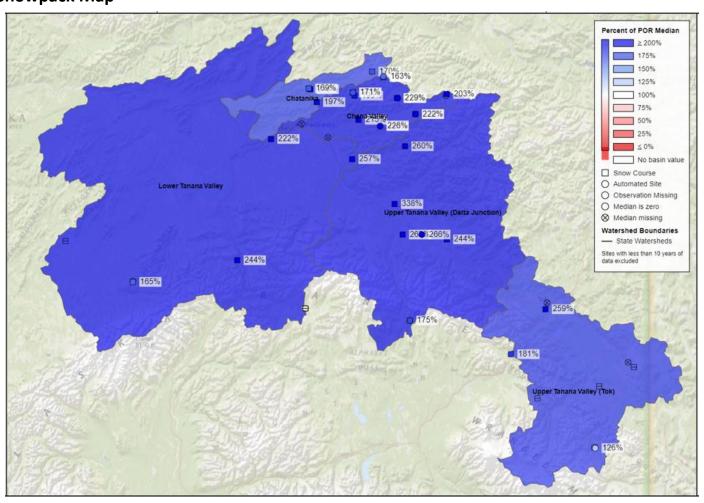
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
American Creek	1050	5.4	3.3		
Atigun Pass	4800	5.8	4.0	5.5	105%
Chandalar Shelf	3300	4.8	2.8		
Eagle Summit	3650	9.6	4.4	5.0	192%
Fort Yukon	430	4.4	2.7	3.6	122%
Jack Wade Jct	3585	6.7	5.0		
Upper Nome Creek	2520	9.9		6.6	150%

#### **Streamflow Forecasts**





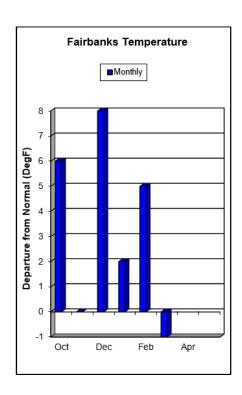
### **Snowpack Map**



### Tanana Basin

#### **Snowpack**

The snowpack in the Tanana basin is one for the record books. Of the 30 reporting stations used to index the basin, 10 boasted all time period of record maximum April 1 SWE measurements; many of these are all-time records. Many of these sites have more than 50 years of record. Tok and Shaw Creek Flats both reported site records with measurements higher than any in 63 years of record. March snowfall was mixed across the basin. The stations on the southern side of the basin reported well above normal March precipitation, whereas the northern stations received well below. This snowpack continues to be bolstered by huge gains in December and a well above average February. There isn't a single station reporting below normal April 1 SWE, and the basin index is 210% of normal for April 1, 2022.



#### **Snowpack Data**

		:	Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal	
Bonanza Creek	1150	38	31	21	10.2	6.2	4.8	
Caribou Creek	1250	29	29	22	7.6	5.7	4.7	
Caribou Snow Pillow	900	32	30	23	8.7	5.7	4.6	
Chena Lakes	500	26	19		8.2	4.3		
Chisana	3320	22	20		4.8	3.9	3.5	
Cleary Summit	2230	45	35	30	12.2	6.3	6.2	
Colorado Creek	700	34	30	23	8.8	5.5	4.2	
Creamers Field	440	26			6.9			
Faith Creek	1750	34	32	26	8.5	5.2	4.8	
Fielding Lake	3000	52	37		13.9	7.7		
Fielding Lake	3000	64	48	40	18.0	9.7	10.0	
Fort Greely	1500	37	19	16	8.4	2.8	3.4	
French Creek	1800	50	34	25	13.6	7.0	5.2	
Gerstle River	1200	33	18	17	7.8	3.2	3.1	
Granite Crk	1240	35	24		10.1	4.2	3.6	
Kantishna SNOTEL	1550	37	38		9.3	8.4		
Kantishna	1550	36		23	7.9		4.7	
Mentasta Pass	2430	46	36	27	11.6	7.3	6.0	
Monument Creek	1850	41	27		11.9	5.4	5.4	
Mt. Ryan	2800	38	34		9.8	6.6	6.0	
Munson Ridge	3100	60	47		17.6	9.2	8.0	
Nenana	415	26	24					
Paradise Hill	2010	33			8.4			
Rock Creek Bottom	2250	47		20	10.0		4.0	
Shaw Creek Flats	980	40	18	15	9.8	3.0	3.0	
Teuchet Creek	1640	36	24		8.9	4.8	4.0	
Tok Junction	1650	38	23	20	8.8	3.7	3.4	
Upper Chena	2850	48	39				6.8	
*Estimate								

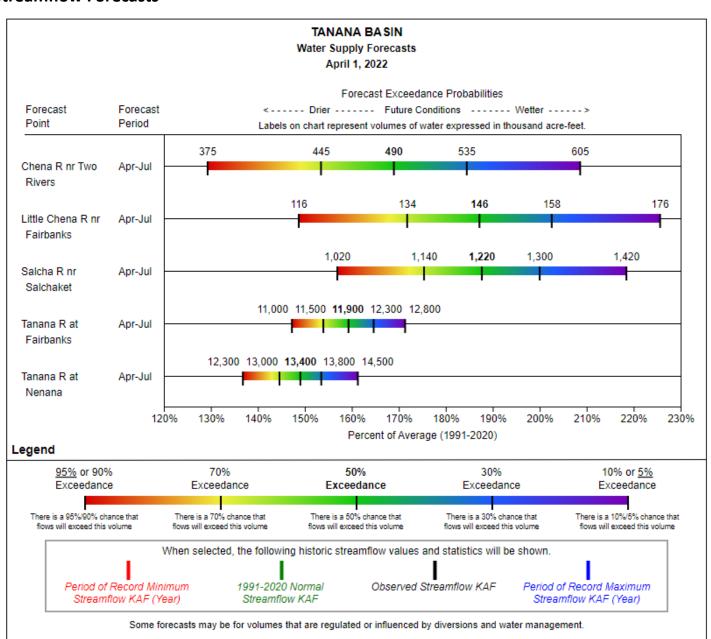
### Tanana Basin

#### **Precipitation**

Inches	A	latad	ainaa	October	1 -
IIICHES	Accumu	เลเษน	SHICE	October	15

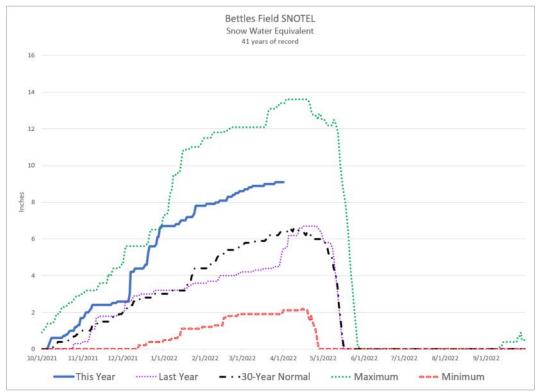
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
Chena Lakes	500	11.6	5.5		
Chisana	3320	4.5	4.4	3.4	132%
Creamers Field	440	8.8			
Fielding Lake	3000	15.1	7.8		
Granite Crk	1240	9.0	4.2	3.7	243%
Kantishna	1550	12.6	7.0	5.3	238%
Monument Creek	1850	10.4	5.4	5.8	179%
Mt. Ryan	2800	9.6	6.5	5.5	175%
Munson Ridge	3100	15.4	7.9	7.5	205%
Nenana	415	9.0	4.7	3.7	243%
Paradise Hill	2010	8.2			
Teuchet Creek	1640	8.9	4.6	4.2	212%
Upper Chena	2850	8.1	7.2	6.9	117%

#### **Streamflow Forecasts**

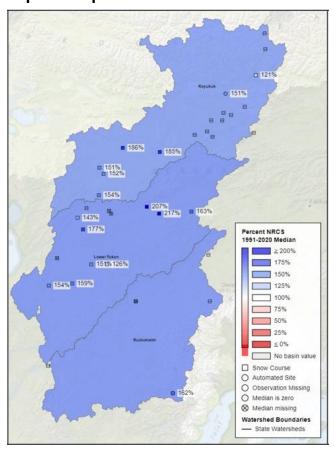


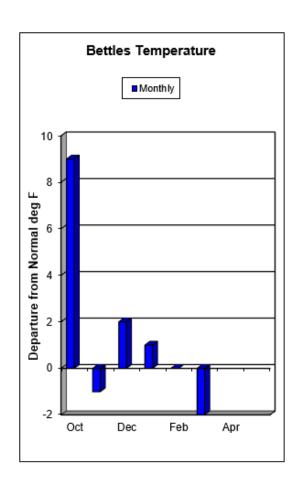
## Western Interior Basins





## **Snowpack Map**





### Western Interior Basins

#### **Snowpack**

#### Koyukuk

Snow in the Koyukuk basin is above normal. With the exception of the Bonanza Forks snow course at 98% of normal, all stations are reporting above average April 1 snow water content. Snowpacks continue to be bolstered by big gains made earlier in the winter. The 11 stations used to index the basin are reporting 144% of normal snow water content for April 1, 2022.

#### Kuskokwim

Snow in the Kuskokwim basin is above average. Telaquana Lake snow course was measured at 6.1" water content, the seventh highest April 1 reading in 29 years of observations. The lower Kuskokwim received above average precipitation, but not all of it as snowfall. Aniak ended the month with less snow depth than it started with, but received 1.0" of precipitation during the month. McGrath snowpack is estimated to be 169% of normal.

#### **Lower Yukon**

The Lower Yukon has an above normal snowpack with the basin index at 153% of normal for April 1 SWE. Galena AK SNOTEL has 29" of snow with 7.1" of water content, the highest April 1 reading in its four-year record.

#### **Snowpack Data**

		Snow Depth (in)		Water Content (in)			
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Koyukuk							
Bettles Field	640	35	32		9.1	5.5	6.4
Bonanza Forks	1200	25	24	28	5.5	4.7	5.6
Cloverleaf	170	29	36	26	7.6*	6.8*	5.7
Coldfoot	1040	30	26		7.1*	3.8*	6.2
Colville Bend	170	29	32	29	8.1	6.2	6.0
Disaster Creek	1550	24	19	22	4.5	4.5	4.2
East Chalatna	430	36			8.6*		
Gobblers Knob	2030	1	8				
Huggins Creek	290	38	42	30	10.2*	7.8*	6.2
Jr Slough	160	31	36	27	8.0*	6.2*	6.6
Kaldoyeit	750	42	21	24	10.3*	4.2*	5.5
Kanuti Chalatna	670	32	26	26	7.9*	5.3*	5.8
Kanuti Kilolitna	550	28	22	22	7.5*	4.0*	4.6
Minnkokut	580	36	34	34	8.9*	6.6*	7.2
Nolitna	560	39	25	26	10.4*	5.3*	5.6
Table Mountain	2200	24	18	22	4.9	4.5	4.3
Treat Island	190	27	23	22	8.5	4.2	5.0
Lower Yukon							
Bullfrog	100	45	43		13.0*	9.0*	
Deer Creek	195	42	42	31	12.1*	8.1*	6.5
Galena AK	410	29	26		7.1	5.3	
Galena Ecological Site	128	31	28		6.7	5.2	
Hozatka Lake	206	23	25				
Little Mud River	855	24	25	21	7.2*	4.7*	4.6
Lower Nowitna River	205	33	32	24	9.4*	5.6*	5.0
Middle Innoko	150	38	48	34	12.1*	9.0*	8.0
Ninemile Island	140	35		30	9.0*		6.6
Pike Trap Lake	130	21	20	15	5.5*	3.8*	3.1
Squirrel Creek	150	36	47	32	9.7*	9.2*	7.6
Upper Innoko	180	29	39	32	9.3*	7.6*	7.4
Wapoo Hills	220	41	55	37	13.3*	11.2*	8.0
Yankee Slough	100	45	47	41	13.3*	8.9*	9.2
*Estimate							

### **Western Interior Basins**

#### **Snowpack Data Continued**

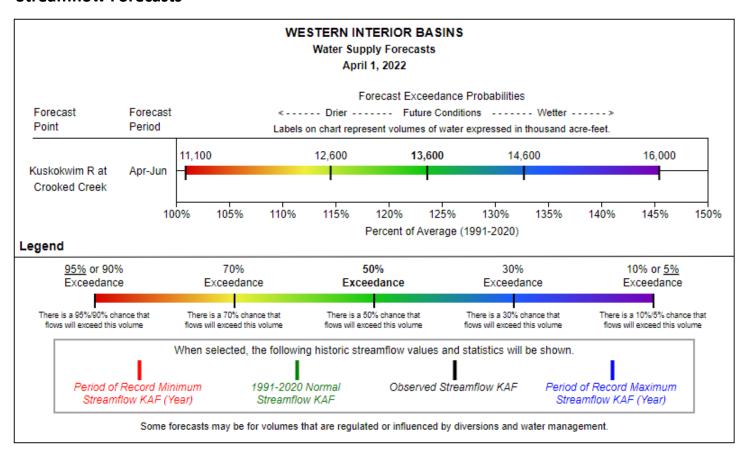
		Snow Depth (in)			Water Content (in)		t (in)
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Kuskokwim							
Aniak	80	10	33				
McGrath	340	35			11.8	11	
Purkeypile Mine	2025	30	38	26	7.5*	8.2*	5.2
Telaquana Lake	1550	20	36	19	6.1	8.4	4.4
Telaquana Lake SNOTEL *Estimate	1275	16	32		6.3	9.0	

#### **Precipitation**

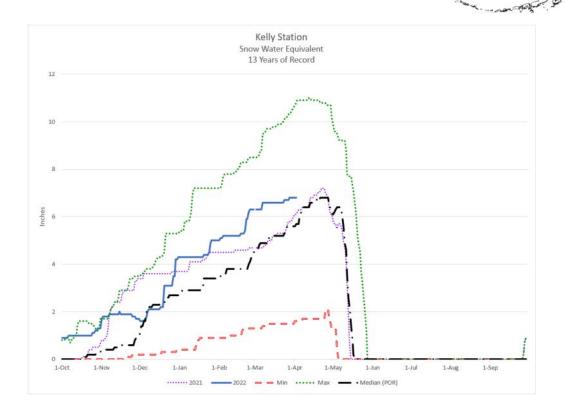
Inches Accumulated since October 1st

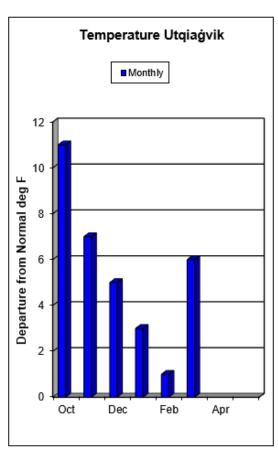
r Last Year 199 <sup>.</sup>	4 2020 Name al	0/ 6 1
	1-2020 Normal	% of Normal
5.4 4.8 4.9	6.6 5.8 5.8	129% 105% 107%
11.7 9.3 9.9	5.6 	295%  
5.5 5.2		
	5.4 4.8 4.9 11.7 9.3 9.9	5.4 6.6 4.8 5.8 4.9 5.8 11.7 5.6 9.3 9.9

#### **Streamflow Forecasts**



## Arctic and Kotzebue Sound





#### **Snowpack**

#### <u>Arctic</u>

The stations along the Dalton highway are reporting a third month in a row of below normal winter precipitation. March precipitation was 45% of average for the 4 stations used to index this basin. Snow depth measurement points along the Dalton Highway are mixed, with Prudhoe Bay moderately above, and the others moderately below, period of record median.

#### **Kotzebue**

Snowpack in the Kotzebue Sound is above average. Kelly Station, the only SNOTEL station used to index this region, is reporting 29" of snow and 6.8" water content. This ranks 5<sup>th</sup> out of 13 observations and 124% of period-of-record median.

## Arctic and Kotzebue Sound

## **Snowpack Data**

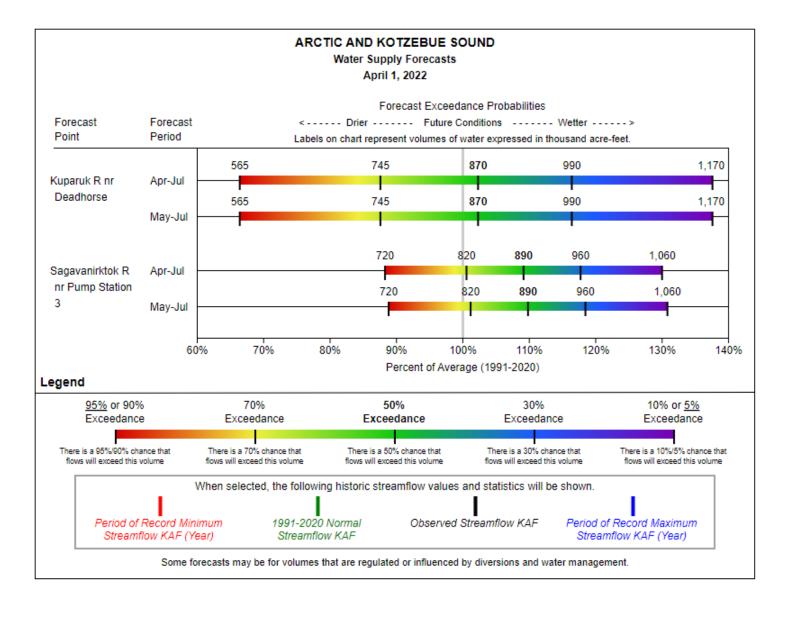
		Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Atigun Pass	4800	39	41				
Imnaviat Creek	3050	18	22				
Kelly Station	310	29	30		6.8	6.1	5.5
Prudhoe Bay	30	19	9				
Sagwon	1000	14	21				
*Estimate							

## Precipitation

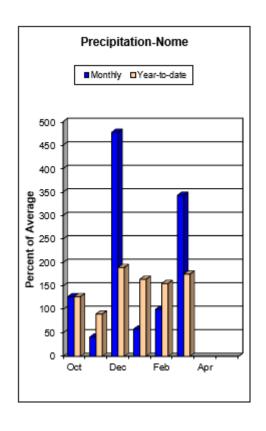
		Inches Accumulated since October 1st						
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal			
Arctic								
Atigun Camp	3400	2.4	2.1					
Atigun Pass	4800	5.8	4.0	5.5	105%			
Imnaviat Creek	3050	2.9	2.2	2.9	100%			
Prudhoe Bay	30	2.5	3.1	3.1	81%			
Sagwon	1000	3.2	2.5	2.8	114%			
Kotzebue Sound								
Kelly Station	310	5.3	6.9	6.9	77%			

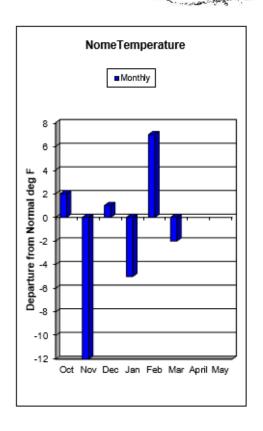
## Arctic and Kotzebue Sound

#### **Streamflow Forecasts**



## Norton Sound/Y-K Delta/Bristol Bay





#### **Snowpack**

The Seward Peninsula received below average precipitation for March. The 3 stations used to index the basin are reporting 25% monthly precipitation. Reported snow depths at Rocky Point and Pargon Creek are near period-of-record median.

#### **Precipitation**

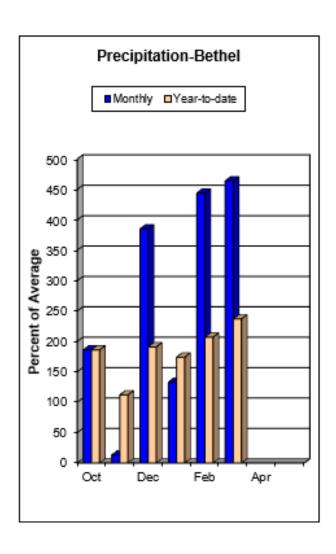
Inches Accumulated since October 1st

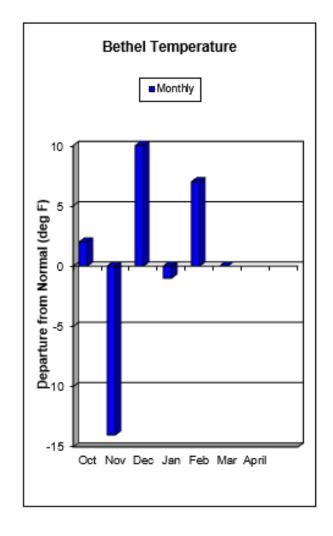
Site Name	Elev.	This Year	Last Year	1991-2020 Nor- mal	% of Normal
Norton Sound					
Pargon Creek	100	6.4	6.4	5.9	108%
Rocky Point	250	4.4	3.9	5.4	81%

## Norton Sound/Bristol Bay

## **Snowpack Data**

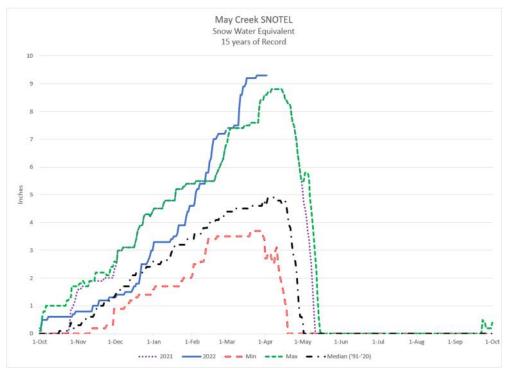
		Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Pargon Creek	100	15	17				
Rocky Point	250	24	41				

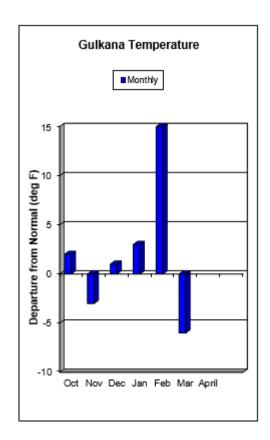




## **Copper Basin**







#### **Snowpack**

Snowpack in the Copper River Basin is considerably above normal for most of the basin. The exception is in the Chugach Mountains near Thompson Pass, which has slightly below normal snowpack. Of the 28 stations measured in the basin, 10 boasted alltime records for April 1 SWE, all of which are north of the confluence with the Chitina River. Of note are Mentasta Pass and Haggard Creek snow courses with record breaking April 1 measurements and 61 and 59 years of observations respectively. The snowpack at Haggard Creek is an all-time record high. The Chugach Mountains on the southern boundary of this basin tell another story. Worthington Glacier, the snow course with the most SWE in absolute numbers (21.6") is reporting the least snow as a percentage of normal (90%); and ranks 45 out of 65 years of observation. Comparatively, the 11.4" of SWE measured at Chistochina is 317% of normal and highest in 38 years of observation. March snowfall was above normal for the 3<sup>rd</sup> month in a row. The 23 stations used to index this basin are reporting 154% of normal SWE for April 1, 2022

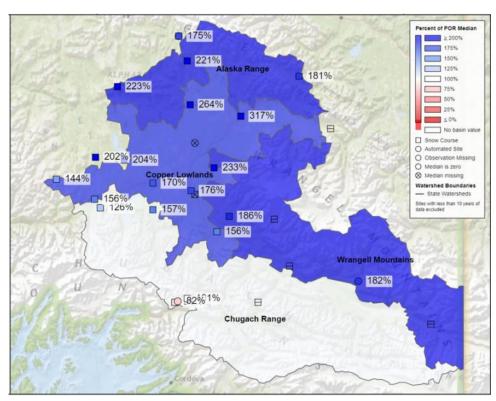
## **Copper Basin**

### **Snowpack Data**

Snowpack Data			Snow Depth (in	)	Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Chistochina	1950	43	29	18	11.4	5.4	3.6
Copper Center	1264	28	25		7.4	4.7	
Dadina Lake	2160	40	33	28	11.7	6.4	6.3
Fielding Lake	3000	64	48	40	18.0	9.7	10.0
Fielding Lake	3000	52	37		13.9	7.7	
Gulkana River	1830	36	24		10.5	6.2	
Haggard Creek	2540	56	35	28	15.6	6.4	5.8
Kenny Lake School	1300	21	21	16	5.6	4.1	3.7
Little Nelchina	2650	34	23	24	7.8	4.4	5.0
May Creek	1610	36	37		9.3	8.6	4.7
Mentasta Pass	2430	46	36	27	11.6	7.3	6.0
Monsoon Lake	3100	51	26	28	14.3*	5.4*	6.4
Paxson	2650	56	40	32	15.5	7.6	6.8
Sanford River	2280	45	35	25	14.0	6.4	5.7
St. Anne Lake	1990	31	26	24	7.4	4.6	5.0
Tazlina	1250	26	20	16	6.7	4.5	3.8
Tolsona Creek	2000	30	26	22	7.3	4.7	4.3
Tsaina River	1650	51	56	53	16.0	15.8	15.4
Twin Lakes	2400	34	26	24	7.3	5.0	5.2
Upper Tsaina River	1750	56	73		16.0	21.4	19.6
Worthington Glacier	2100	72	76	73	21.6	26.3	24.0

## **Snowpack Map**

\*Estimate



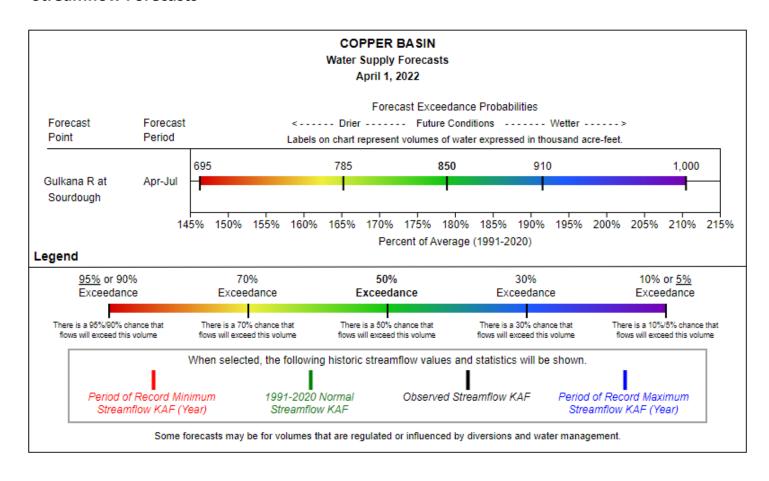
## **Copper Basin**

#### **Precipitation**

Inches Accumulated since October 1st

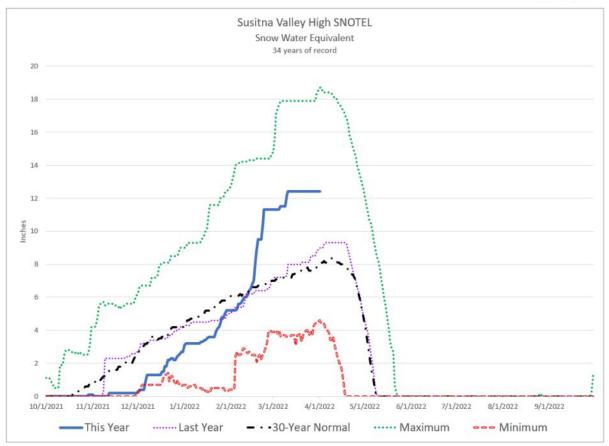
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
Fielding Lake	3000	15.1	7.8		
Gulkana River	1830	9.7	7.0		
May Creek	1610	8.8	8.5	6.0	147%
Upper Tsaina River	1750	17.8	23.5	25.9	69%

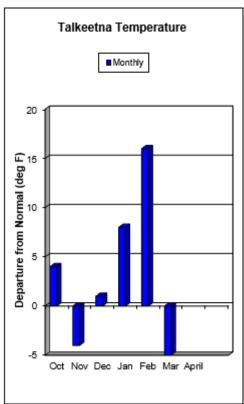
#### **Streamflow Forecasts**



## Matanuska—Susitna Basin







#### **Snowpack**

The snowpack in the Matanuska and Susitna basins is well above average. The Upper Susitna contains all the period of record maximums for this region. Some of these records have stood for quite some time. The Lake Louise and Square Lake snow courses both reported the highest snowpack in 59 years of observation. Lower down the Susitna Basin, snowpacks are not breaking records, but they are stout. The Chulitna Basin is indexed at 143% normal. In the Talkeetna Mountains, the Fishhook basin snow course was measured at 31.0" SWE, 174% of normal and 6<sup>th</sup> highest in 59 years of observation. March snowfall was above average and concentrated in the middle of the month. For April 1, 2022, the 26 reporting stations used to index the region were 162% of normal SWE.

## Matanuska—Susitna Basin

Snowpack Data		Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Alexander Lake	160	39	37		11.5	10.3	
Birthday Pass	4020	120	84		42.0	27.0	
Blueberry Hill	1200	60	62	46	19.6	14.7	13.1
Chelatna Lake	1450	47	50	38	14.2	13.0	9.9
Curtis Lake	2850	38	30	22	8.5	5.2	4.1
Denali View	700	50	44	38	15.1	10.7	10.2
Dunkle Hills	2700	48	38	33	14.7	9.5	8.8
Dutch Hills	3100	90	68	75	31.5	17.8	24.5
E. Fork Chulitna	1770	55	58	45	16.5	11.4	12.3
East Palmer	230	17	13			1.7	
Fishhook Basin	3300	90	66	56	31.0	20.0	17.8
Fog Lakes	2120	43	30	24	12.3	5.7	5.0
Frostbite Bottom	2700	72	61		24.3	16.1	
Horsepasture Pass	4300	36	29	30	9.1	6.1	6.9
Independence Mine	3550	98	70	65	34.9	20.4	20.4
Independence Mine SNOTEL	3550	90	62		32.8	16.6	
Lake Louise	2400	37	30	24	9.2	5.3	4.7
Little Susitna	1700	59	60	37	18.8	14.0	10.0
Nugget Bench	2010	63	48	46	19.5	12.0	13.8
Ramsdyke Creek	2220	81	59	62	27.1	15.6	19.2
Sheep Mountain	2900	32	30	25	7.8	5.9	5.2
Spring Creek	580	14	16				
Square Lake	2950	39	29	21	7.9	4.9	4.2
Susitna Valley High	375	40	40		12.4	9.0	7.9
Talkeetna	350	38	34	26	11.8	7.3	6.4
Tokositna Valley	850	60	60		18.9	15.1	13.8
Tyone River	2400	41	18	21	10.7*	3.6*	4.4
Upper Oshetna River	3150	40	27	22	10.1*	4.9*	4.6
Upper Sanona Creek	3100	39	28	28	9.7*	4.7*	5.6
Willow Airstrip	200	40	44	28	12.9	10.9	6.8
*Estimate							

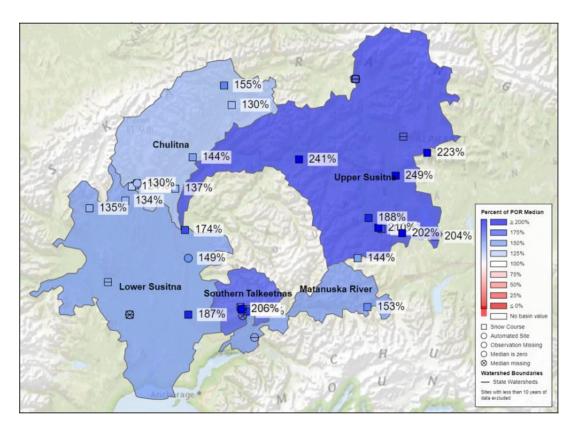
## Precipitation

Inches Accumulated since October 1st

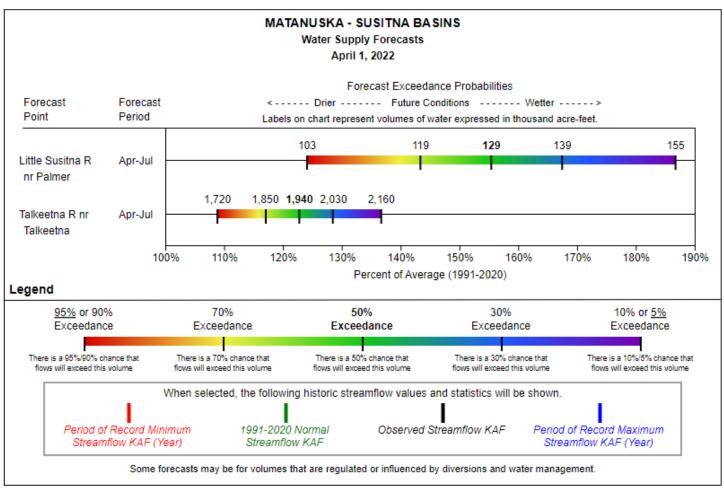
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
Alexander Lake	160	18.0	13.4		
Frostbite Bottom	2700	22.8	16.1		
Independence Mine	3550	27.3	15.9	16.4	166%
Spring Creek	580	11.1	7.7		
Susitna Valley High	375	16.9	11.1	11.6	146%
Tokositna Valley	850	21.6	15.4	20.8	104%

### Matanuska—Susitna Basin

#### **Snowpack Map**

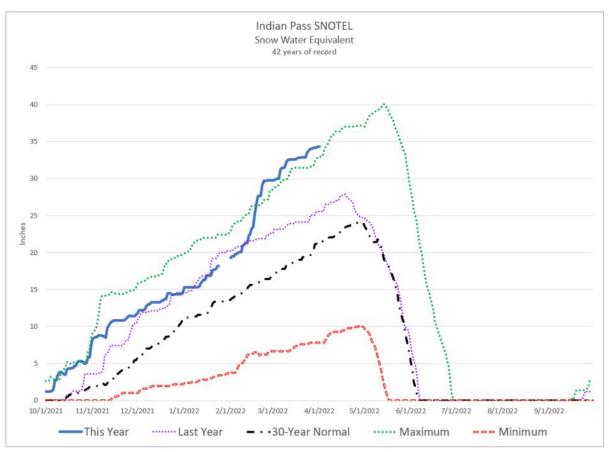


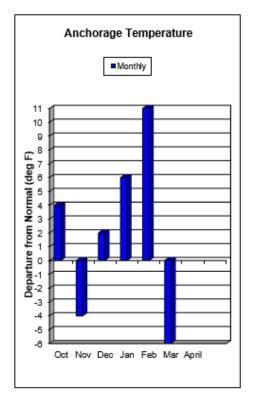
#### Streamflow Fore-



## Northern Cook Inlet







#### Snowpack

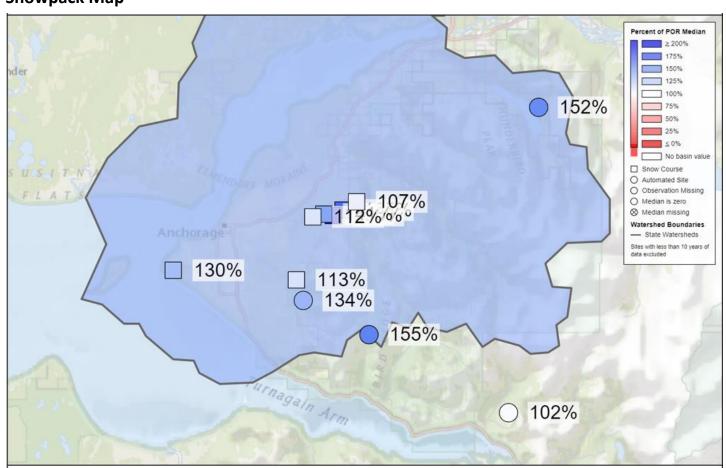
The Northern Cook Inlet region has an above average snowpack. All sites in this region are reporting above average water content on April 1, 2022. March precipitation was above average for the region; however, not uniformly so. Indian Pass received considerably more precipitation than Anchorage Hillside and Moraine SNOTEL above Eklutna Reservoir. Additionally, rain and warm temperatures at lower elevations resulted in a loss in snowpack at Kincaid Park, Arctic Valley #1 and Arctic Valley #2 snow courses; all at or below 1000' of elevation. The other April 1 SWE measurements in this region made gains over the month. Indian Pass SNOTEL reported 34.3" SWE which is 166% of normal and ranks as the highest April 1 reading in 43 years of observation. The 12 reporting stations used to index the Northern Cook Inlet region are 141% of normal SWE for April 1, 2022.

## Northern Cook Inlet

#### **Snowpack Data**

		S	Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal	
Anchorage Hillside	2080	44	48		13.1	12.9	9.2	
Arctic Ski Bowl	3000	40	53	38	13.4	18.5	11.5	
Arctic Valley #1	500	12	26	14	3.6	5.4	3.6	
Arctic Valley #2	1000	22		20	6.5		5.0	
Arctic Valley #3	1450	41	42	29	12.7	10.3	7.1	
Arctic Valley #4	2030	39	42	28	11.4	10.5	7.0	
East Palmer	230	17	13			1.7		
Indian Pass	2350	94	78		34.3	25.6	21.3	
Kincaid Park	250	22	25	16	5.7	5.4	4.3	
Moraine	2100	36	38		10.8	8.3	6.4	
Mt. Alyeska	1540	94	97		32.1	32.8	28.8	
Portage Valley	50	37	54	45	15.5	18.2	15.2	
South Campbell Creek	1200	25	39	26	6.9	9.5	6.1	
Spring Creek	580	14	16					
*Estimate								

## **Snowpack Map**



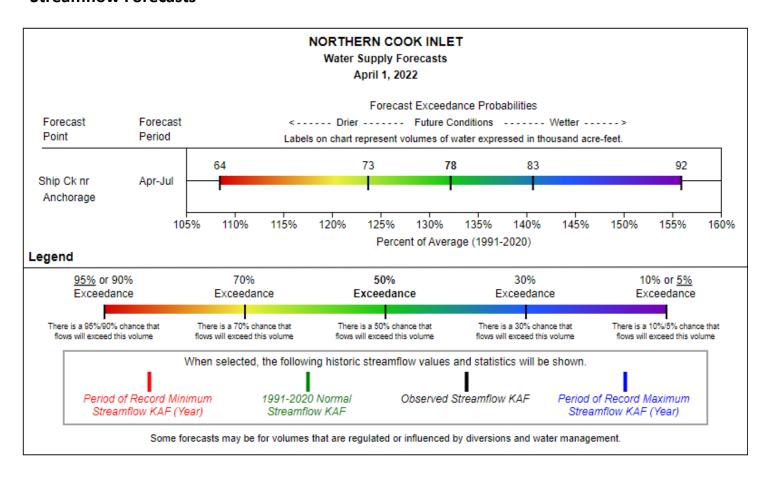
## Northern Cook Inlet

### **Precipitation**

Inches Accumulated since October 1st

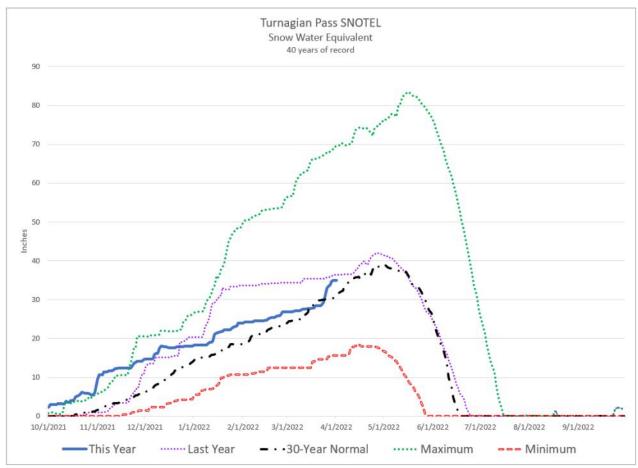
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
Anchorage Hillside	2080	16.8	14.5	14.3	117%
Indian Pass	2350	32.4	28.3	25.4	128%
Moraine	2100	14.2	10.5	10.5	135%
Mt. Alyeska	1540	52.6	38.6	42.0	125%
Spring Creek	580	11.1	7.7		

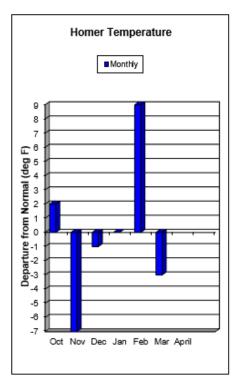
#### **Streamflow Forecasts**



### Kenai Peninsula







#### Snowpack

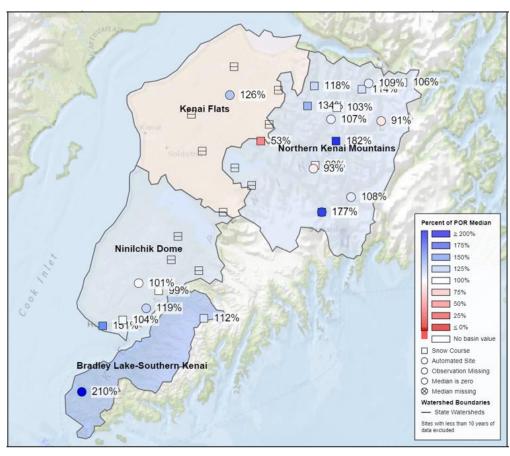
Snowpack on the Kenai Peninsula is generally above normal, although not uniformly so. March precipitation was above normal and steady throughout the month but came with warm temperatures and low elevation rain. The eastern Kenai Peninsula made significantly more snowpack gain over the month than the western Kenai Peninsula. At Turnagain Pass SNOTEL the March increases were near constant with a significant uptick towards the end of the month. During the last week of March, the local avalanche center measured 4-6 feet of new snow and issued a considerable or high avalanche rating for the forecast area. Warm temperatures in the lower elevations of the central Kenai, resulted in a loss in snowpack measured at the Jean Lake and Snug Harbor snow courses. Around Homer snowpack continues to be more robust towards the mouth of Cook Inlet. The 16.8" SWE reported at Port Graham on April 1 is 240% of normal and ranks 2<sup>nd</sup> highest in 22 years of observation. The 24 stations that index the Kenai Peninsula are reporting 118% of normal SWE of April 1, 2022.

## Kenai Peninsula

#### **Snowpack Data**

Snowpack Bata			Snow Depth (in	)	Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Anchor River Divide	1653	41	55		12.1	17.7	11.7
Bertha Creek	950	57	75	50	18.4	22.9	15.8
Bridge Creek	1300	43	46	38	12.9	14.2	10.8
Cooper Lake	1200	45	61		12.8	17.6	13.8
Demonstration Forest	780	37	32	26	11.6	10.0	7.2
Eagle Lake	1400	44	57	40	11.3	19.1	11.6
Exit Glacier	400	61	65	47	21.2	19.9	15.7
Exit Glacier SNOTEL	400	61	70		17.7	21.6	
Grandview	1100	81	104		27.4	35.9	30.0
Grouse Creek Divide	700	62	68		19.0	25.7	16.4
Jean Lake	620	6	23	16	2.0	5.8	4.0
Kenai Moose Pens	300	19	27		6.3	5.5	5.0
Kenai Summit	1390	50	63	48	14.4	19.6	14.2
Lower Kachemak Creek	1915	60	73				
Mcneil Canyon	1320	36	49		11.4	14.6	9.2
Middle Fork Bradley	2300	54	89				
Moose Pass	700	37	49	20	12.0	14.1	6.0
Mt. Alyeska	1540	94	97		32.1	32.8	28.8
Nuka Glacier	1250	100		74	35.8		32.0
Pass Creek	1200	36	46	33	10.5	12.2	9.0
Port Graham	300	42	44		16.8	12.0	7.0
Portage Valley	50	37	54	45	15.5	18.2	15.2
Resurrection Pass	2250	46	45	38	13.9	13.3	10.2
Snug Harbor Road	500	13	23	16	3.8	6.2	4.3
Summit Creek	1400	41	50		11.4	12.2	10.4
Turnagain Pass *Estimate	1880	116	112		34.9	36.4	30.8

### **Snowpack Map**



### Kenai Peninsula

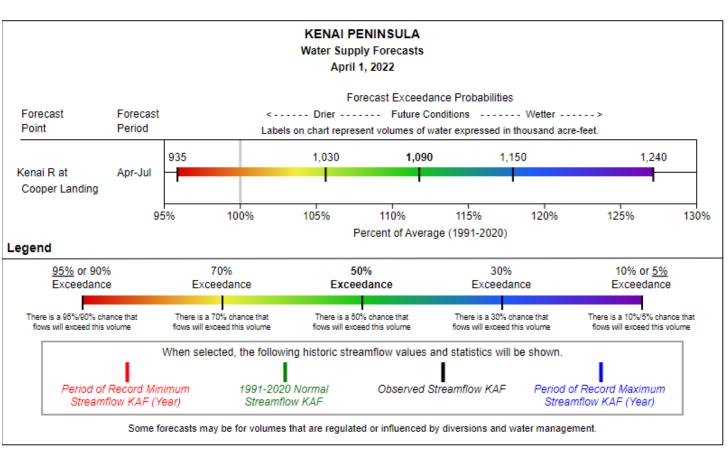
#### **Precipitation**

Inches Accumulated since October 1st

Site Name	Elev.	This Year	Last Year	1991-2020 Nor- mal	% of Normal	
Anchor River Divide	1653	18.7	18.7	17.4	107%	
Cooper Lake	1200	27.5	24.9	24.0	115%	
Exit Glacier	400	47.6	52.5			
Grandview	1100	43.8	33.5	40.0	110%	
Grouse Creek Divide	700	37.6	41.9	35.6	106%	
Kenai Moose Pens	300	9.7	9.6	8.4	115%	
Lower Kachemak Creek	1915	32.9	38.3			
Mcneil Canyon	1320	15.9	17.3	16.4	97%	
Middle Fork Bradley	2300	30.0	35.4	30.4	99%	
Mt. Alyeska	1540	52.6	38.6	42.0	125%	
Summit Creek	1400	18.8	14.4	16.5	114%	
Turnagain Pass	1880	40.8	39.6	38.1	107%	

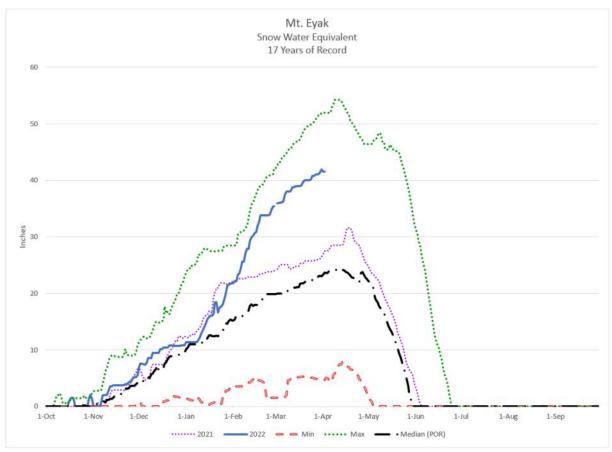
#### **Streamflow Forecasts**

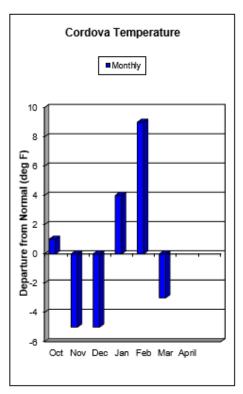
Forecast Point	Forecast Period	% of Average	Maximum(%)	Minimum(%)	50% Exceedance (KAF)	30yr Average (KAF)
Bradley Lake Inflow	Apr-Jul	105	120	89	200	191



## Western Gulf - Prince William Sound







#### **Snowpack**

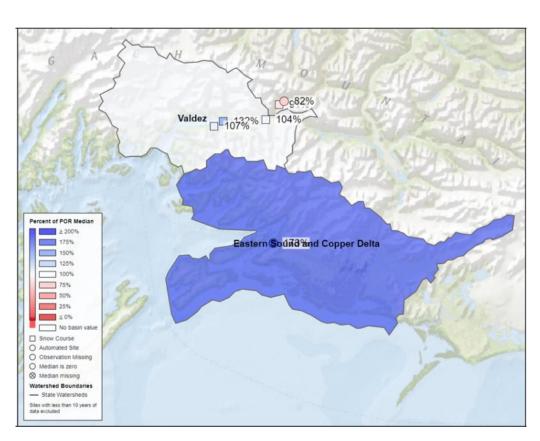
Snowpack in the Western Gulf region is above normal, with all stations reporting above normal SWE on April 1. March Precipitation was above normal and came mixed with rain at lower elevations. The 5.7" of SWE gained at Mt. Eyak SNOTEL was recorded at a nearly uniform rate throughout March. The site collected appears to have collected additional precipitation as rainfall. Regardless of any rain, all SWE measurements made in this region showed advances over the month. The Valdez snow course, at 50 feet of elevation, gained 2.4" SWE over the month; The 21.0" SWE measured on April 1, 2022 is 136% of normal and ranks 10<sup>th</sup> highest in 51 years of observation. As a whole the 12 stations that index the Western Gulf are reporting 116% of normal SWE for the date.

## Western Gulf — Prince William Sound

Snowpack Data		Snow Depth (in)			Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal
Esther Island	50	50	38				
Exit Glacier	400	61	65	47	21.2	19.9	15.7
Exit Glacier SNOTEL	400	61	70		17.7	21.6	
Grouse Creek Divide	700	62	68		19.0	25.7	16.4
Lowe River	600	52	56	48	17.2	16.6	15.6
Mt. Eyak	1405	113	100		41.6	27.5	23.4
Nicks Valley	4280	116	101				
Nuka Glacier	1250	100		74	35.8		32.0
Sugarloaf Mountain	550	97	83	77	29.1	24.5	26.5
Tsaina River	1650	51	56	53	16.0	15.8	15.4
Upper Tsaina River	1750	56	73		16.0	21.4	19.6
Valdez	50	61	52	46	21.0	14.3	15.4
Worthington Glacier	2100	72	76	73	21.6	26.3	24.0

<sup>\*</sup>Estimate

## **Snowpack Map**



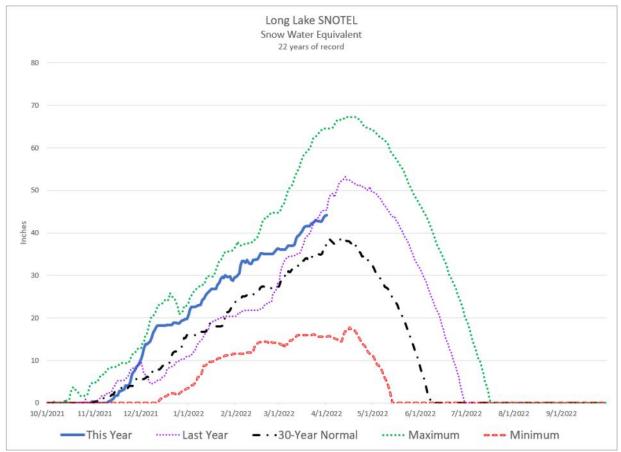
## Precipitation

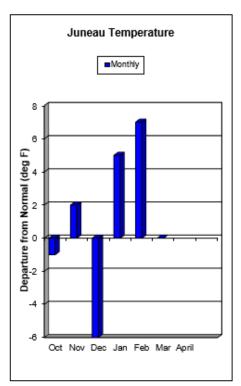
			<b>~</b> · · · · · · · · · · · · · · · · · · ·
Inches	Accumulated	since	October 1st

			money recumulated emice established				
Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal		
Esther Island	50	93.8	80.1	79.6	118%		
Exit Glacier	400	47.6	52.5				
Grouse Creek Divide	700	37.6	41.9	35.6	106%		
Mt. Eyak	1405	70.4	62.8	68.4	103%		
Nuchek	50	117.9	77.3				
Port San Juan	50	77.1	71.1				
Seal Island	20	39.7	36.0				
Strawberry Reef	30	46.4	37.7				
Upper Tsaina River	1750	17.8	23.5	25.9	69%		

## Southeast







#### Snowpack

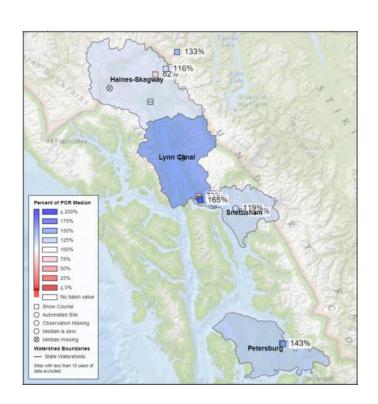
Snowpack in Southeast Alaska is above average. The only measurement in the region that is reporting below normal April 1 SWE is the Fish Creek snow course on Douglas Island. March precipitation was ample and steady throughout the month. All stations reported above average monthly precipitation; however, storms came with high rain lines and lower elevation snow courses lost snowpack over the month. Near Skagway, the West Creek snow course at 475 feet ASL lost 2.5" SWE, whereas the Moore Creek snow course at 2250 feet ASL gained 1.0". Similarly on Douglas Island, near Juneau, Fish Creek at 500 feet ASL lost snowpack, whereas Eaglecrest and Cropley Lake at 1250 and 1650 feet ASL respectively, gained snowpack. The 49.7" of SWE (estimated for April 1st) at Cropley Lake is 169% of normal and ranks 2nd highest in 45 years of observation. The 12 stations that index Southeast Alaska are reporting 134% of normal SWE on April 1, 2022.

## Southeast

## **Snowpack Data**

Show pack Bata		Snow Depth (in)				Water Content (in)		
Site Name	Elev.	Current	Last Year	1991-2020 Normal	Current	Last Year	1991-2020 Normal	
Cropley Lake	1650	126	136	84	49.7	47.8	29.4	
Eagle Crest	1200	72	101	54	28.2	35.7	18.6	
Fish Creek	500	6	34	8	2.1	10.2	2.7	
Heen Latinee	2065	92	89		30.8	25.8		
Long Lake	850	103	138		44.2	45.3	37.0	
Moore Creek Bridge	2250	76	99	61	23.1	32.5	19.7	
Moore Creek Bridge SNOTEL	2250	79	110					
Petersburg Reservoir	550	16	50	9	6.6	14.3	3.2	
Petersburg Ridge, S.	1650	95	142	71	31.2	43.5	24.9	
Speel River	280	78	103	72	34.2	34.6	27.1	
West Creek	475	21	55	24	7.7	18.6	7.7	
*Estimate								

### **Snowpack Map**



## **Precipitation Data**

Inches Accumulated since October 1st

Site Name	Elev.	This Year	Last Year	1991-2020 Normal	% of Normal
Long Lake	850	113.8	110.3	96.2	118%
Moore Creek Bridge	2250	25.0	35.2	27.3	92%

#### **Streamflow Forecast**

Forecast Point	Forecast Period	% of Average	Maximum(%)	Minimum(%)	50% Exceedance (KAF	) 30yr Average (KAF)
Taiya River near Skagway	Apr-Jul	138	158	117	640	465

#### For further information contact:

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